NATURAL RESOURCE EDUCATION CENTER

520 N. Camino Mercado Suite 12 Casa Grande, Arizona 85122 (520) 560-4550

Farm Filled "Ag-Ventures"



2020-2021 MID-YEAR REPORT

FALL 2020

CONTRACT: 2020-3105 IGA



NREC is a natural resource and water conservation education program sponsored by the West Pinal Natural Resource Conservation District (NRCD), Eloy NRCD, Florence-Coolidge NRCD, and the Arizona Department of Water Resources (ADWR).

Natural Resource Education Center (NREC) 2020 Mid- Year Report

This mid-year report reflects the new "virtual" NREC Water Out West (WOW) water field day programs and water related classroom activities that were developed and are being delivered in response to CDC and county school district COVID guidelines for the 2020-2021 school year. These virtual programs focus on deepening content knowledge related to water and natural resources, their usage and conservation.

Task 1: Plan and deliver classroom activities that are specifically related to water, increasing students' understanding of the water cycle, water availability in the west, water efficiency and conservation, etc. Activities will be delivered to the Stanfield, Casa Grande, Coolidge, Blackwater Community and Florence school districts.

Task 2: Plan and implement water related field days programs.

Corn Festival and Water Out West

NREC has produced four on-line videos of our fall program, "Corn Festival", that include content delivery and interactive activity support in addition to hosting online Water Festival Days via ZOOM. All NREC "Farm Filled Ag-Venture Programs" are school grade age specific, aligned to the current Arizona State Educational Standards and include a water conservation component.

The Corn Festival is presented as an on-line resource for teachers to utilize with their students during at-home, distance (on-line) learning. This program has been delivered to **178 students** in **7 classrooms**. Teachers complete an emailed survey after completion of the on-line lessons with their students. **One hundred percent** of participating teachers "strongly agree" or "agree" with the following statements: The videos and activities were relevant and improved my students' knowledge of natural resources, The videos provided background knowledge of corn as a food crop and how it utilizes water to grow, The videos provided activities and resources that students can share with their families at home.

The Water Out West (WOW) program has been developed for ZOOM meetings to be delivered as an in-classroom, on-line presentation. NREC staff meets with teachers and students on-line and presents a grade level appropriate 40-minute water cycle, water availability and conservation lesson utilizing *The Water Savers Issue* booklet. The lesson is followed by a hands-on activity. The booklet and activity materials are complied as individual student "kits" and delivered to the classrooms prior to the scheduled ZOOM meetings.



NREC presenters Loralee Wuertz and Jennifer Salcido on a "WOW" ZOOM meeting with 4th graders from Ironwood Elementary in Casa Grande, AZ.

NREC Corn Festival Video (part 4: corn science) featuring NREC presenter Jan Zapata.





Individual student WOW kit that is delivered to classrooms prior to online WOW ZOOM meeting. Kit includes a *Water Savers* magazine issue, materials for hands on activity (rain stick shown) and a NREC pencil.

WOW has been presented to **158 students** in **6 classrooms**. Students were asked pre and post questions about water knowledge. The following figure represents the gain in knowledge about water topics pre and post WOW ZOOM presentation.

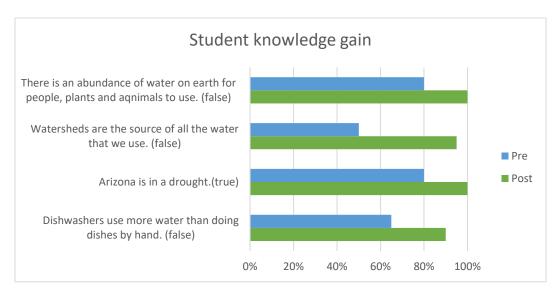


Figure 1: percentage of students answering correctly pre and post WOW presentation